4. PRINT AREA

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[Adjustment Procedures]

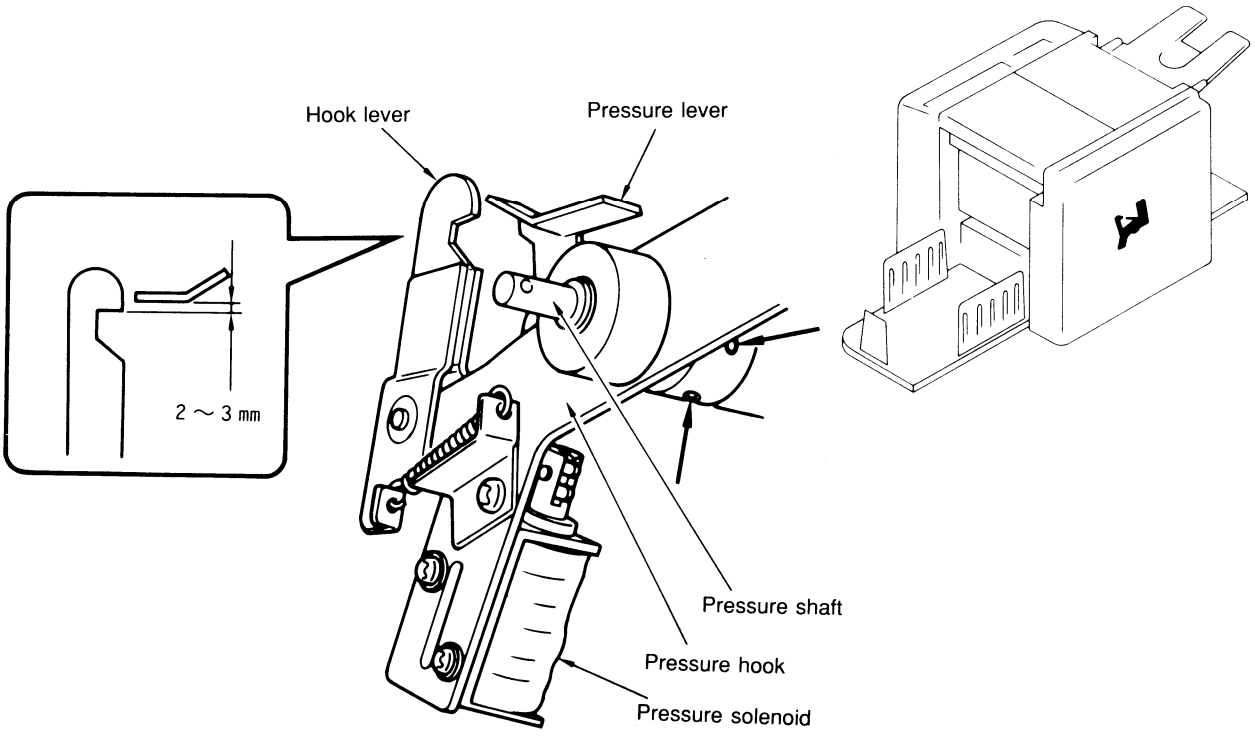
1. Position of Pressure Lever

– Procedure & Check –

1) Put a blank master on the Drum.
   (Select confidential master making.)
2) Remove the Back cover, and rotate the Drum so that the Pressure solenoid on the Pressure hook comes down to the lowest position.
3) Turn the main power off, and loosen the allen screws that secure the Pressure lever.
4) Insert a bar into the hole on the end of the Pressure shaft, and turn the shaft counterclockwise with the bar to lift and press the Pressure roller firmly against the Drum.
5) With the Pressure roller firmly against the drum, move the Pressure lever so that the distance between the top edge of the cut-out on the Hook lever and the bottom of the Pressure lever hook is **2 to 3 mm**.
6) When the 2 to 3 mm is obtained, tighten the allen screws on the Pressure lever.
   When completed, press the Pressure lever down manually to check the adjustment.

– Results of Misadjustment –

1) If the Pressure lever is adjusted too high (the distance is **much more than 3 mm**); ➡
   the Hook lever cannot engage the Pressure lever properly, and the Pressure roller will not be lifted properly, causing a paper jam in the print area.
2) If the Pressure lever is adjusted too low (the distance is **much less than 2 mm**); ➡
   the pressure of the Pressure roller will be too weak against the Drum, which causes the printed copies to be light.
   Or the Pressure roller will not contact the Drum with enough pressure to transport printed copies through the print area causing a paper jam.



2. Resting Position of Pressure Roller

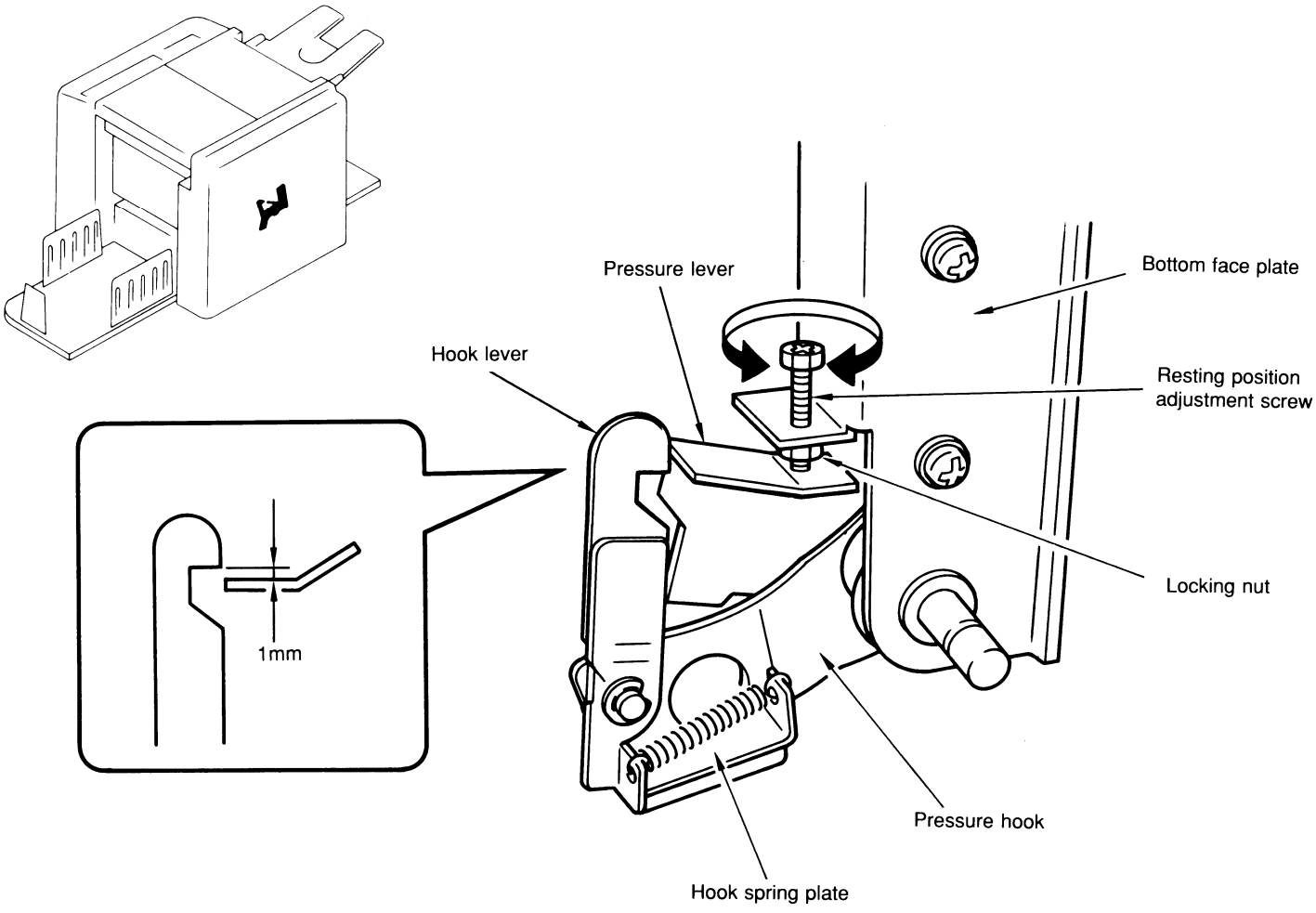
– Procedure & Check –

1) Remove the Back cover.
2) Rotate the Drum so that the Pressure solenoid on the Pressure hook comes up to the highest position.
3) Loosen the locking nut on the Resting position adjustment screw located on the Bottom face plate, and loosen the adjustment screw.
4) Tighten the Resting position adjustment screw gradually until the distance between the top edge of the cut-out portion of the Hook lever and the top of the Pressure lever hook measures **1 mm**, and tighten the locking nut.
5) Check the adjustment by pushing the Hook lever in manually to confirm that it engages the Pressure lever hook correctly.

– Results of Misadjustment –

1) If the Pressure roller's resting position is set too high (the distance is **much more than 1mm**); ➡ the Clamp section on the Drum may contact the Pressure roller, which can cause the Clamp section damaged, or the Pressure roller damage.
2) If the Pressure roller's resting position is set too low (the distance is **much less than 1mm**); ➡ the Pressure lever and the Hook lever will not engage properly, which may cause the Pressure and Hook levers to lock or slip during operation.

   If the levers lock, the Pressure roller will contact the Drum even during the non-printing operation causing the ink on the Drum to be transfered to the Pressure roller.
   If the levers slip during operation, it will cause paper misfeeds in the print area.



3. Position of Pressure Solenoid

– Procedure –

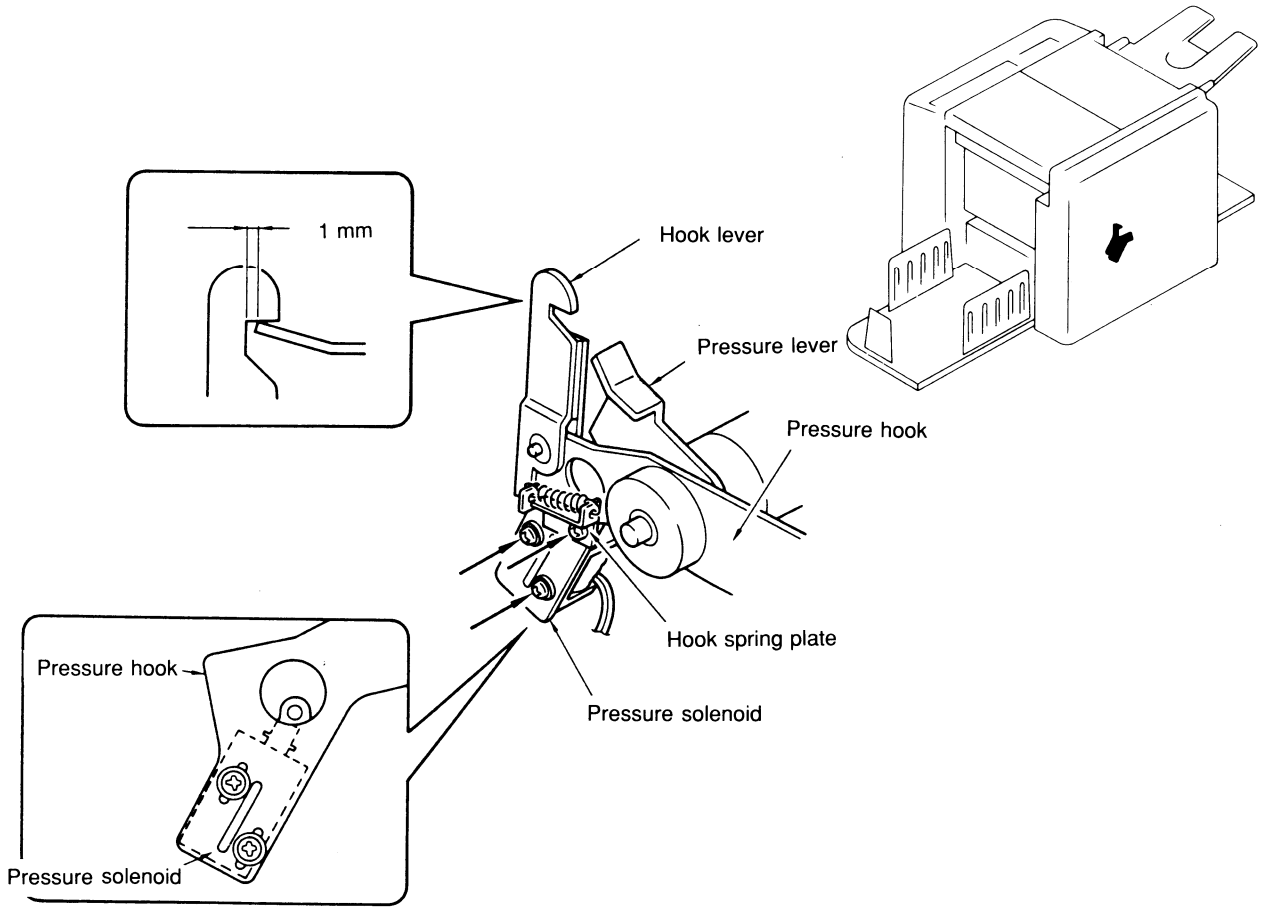
1) Remove the Back cover.
2) Rotate the Drum so that the Pressure solenoid on the Pressure hook comes up to the highest position.
3) Select Test mode **No.48**, which will activate the Pressure solenoid.
4) Adjust the Pressure solenoid so that the gap between the deepest point of the cut-out of the Hook lever and the Pressure lever measures **1 mm or less**.

– Check –

- Perform printing at the highest and lowest speeds, and check that the Pressure lever firmly and properly engages with the Hook lever.

– Results of Misadjustment –

1) If the Pressure lever gap is too loose (the gap is **much more than 1mm**); ➡
   the Hook lever will slip off the Pressure lever and the Pressure roller will not go up, causing a paper jam in the print area.
   This condition may eventually cause damage to the Hook lever and the Pressure lever.
2) If the Pressure lever gap is too tight (there is **no gap**); ➡
   the plunger of the Pressure solenoid will pull on an angle and the Pressure solenoid will be locked.
   As a result, the Pressure roller will not go up, causing a paper jam in the print area.



4. Position of Hook Lever

– Procedure –

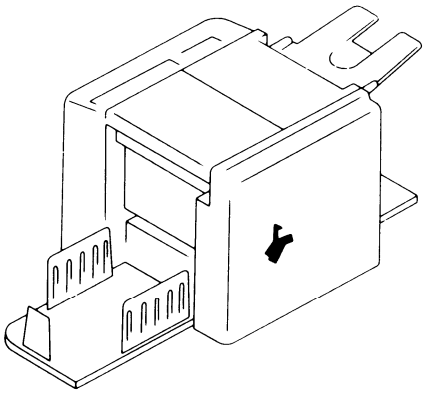
1) Remove the Back cover.
2) Rotate the Drum so that the top edge of the Hook lever cut-out and the bottom of the Pressure lever are even.
3) Loosen the Hook spring plate's mounting screw and adjust the position of the hook spring plate so that the minimum distance between the Pressure lever and the Hook lever is **0.3 to 0.5 mm**.

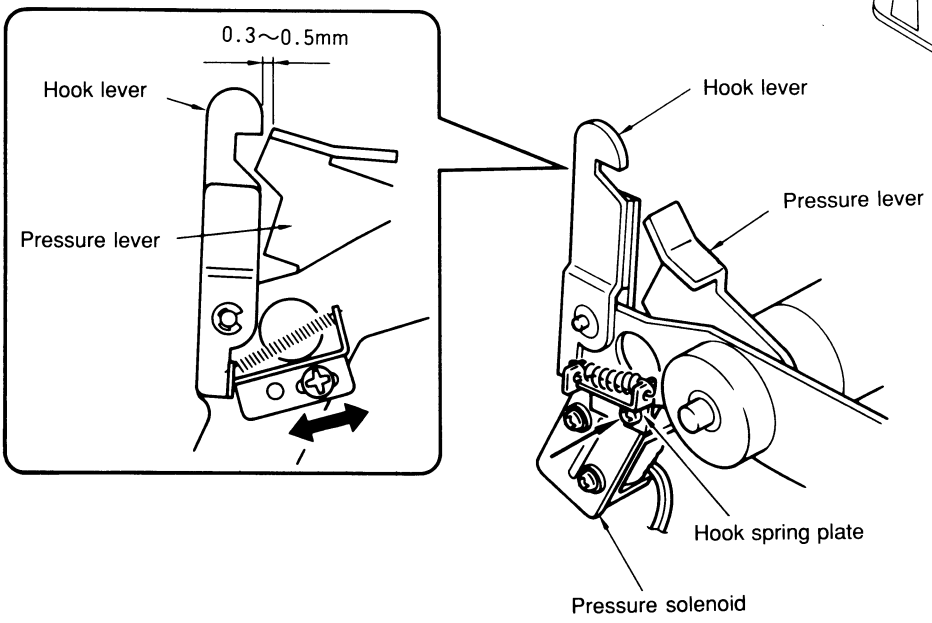
– Check –

- Perform printing at the highest and lowest speeds, and check that the Pressure lever is firmly engaged with the Hook lever during printing.

– Results of Misadjustment –

1) If the distance is too wide; ➡
   the Hook lever cannot engage the Pressure lever enough when the Pressure solenoid is activated, and the Pressure roller will not go up, causing a paper jam in the print area.
2) If the distance is too narrow; ➡
   the Hook lever will touch the Pressure lever, which may lock the levers, causing the Pressure roller to contact the drum even during the non-printing operation.



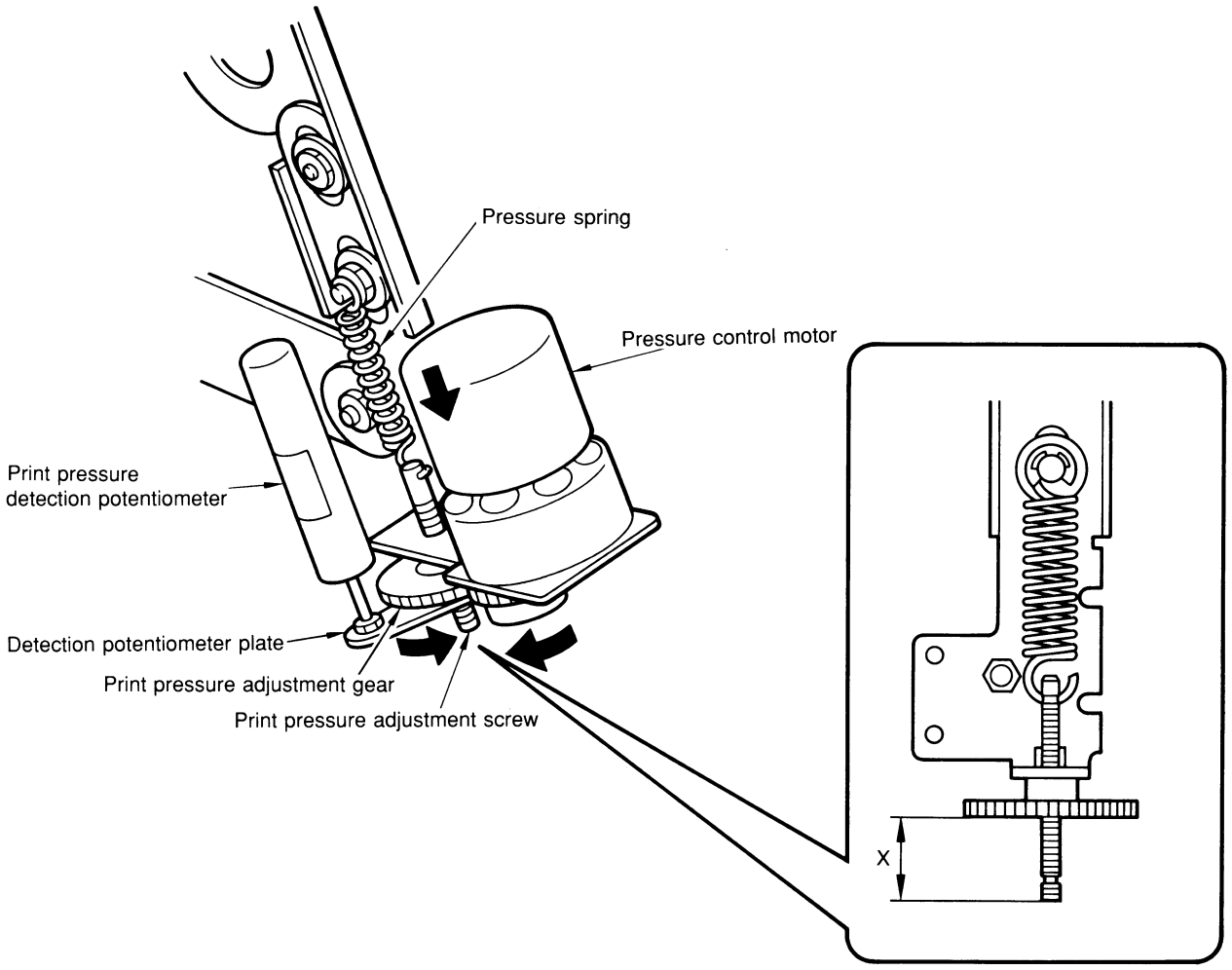


5. Standard Pressure Position

– Check & Adjustment –

1) Remove the Back cover.
2) Press "RESET" button on the Main panel to set the print density mode to **(3)**, and turn off the power switch.
3) Check that the length from the end of the Print pressure adjustment screw to the bottom face of the Print pressure adjustment gear **[X]** should be as shown in the chart to the right.
4) If not, loosen the mounting screws of the Print pressure detection potentiometer and shift up or down the potentiometer along with the bracket. Then fix it.
5) Turn on the power and recheck by repeating **step(2)** that the value is correct.

Drum Type	Standard Value
Legal/A4	X=16mm $^{-0}_{+2}$
B4	X=18mm $^{-0}_{+2}$

– Results of Misadjustment –

1) If the length **[X]** is much more than the standard value; ➡
the print density will be too heavy even in the print density mode(1).
In some cases, the Pressure spring may be pulled too much to recover to the original shape.
As a result, the spring will lose tension, causing the print density too weak. In this case, the spring must be replaced.
2) If the length **[X]** is much less than the standard value; ➡
the print density will be too weak even in the print density mode(5).